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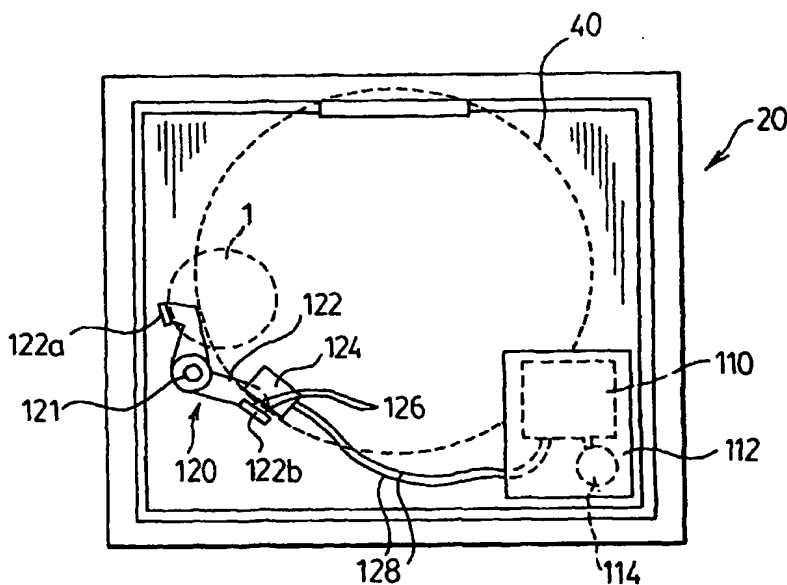
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2,372,995 25 February 2002 (25.02.2002) CA
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- Published:  
— with international search report

[Continued on next page]

(54) Title: A TRACKING SYSTEM FOR VENDING MACHINES



(57) Abstract: A tracking system counts events in the operation of multiple machines or devices over a wide geographic area. For example, for bulk venders the system counts each vend responsive to rotation through a cycle of the coin mechanism, and preferably records the date and time of each vend. An active tag has a memory for storing data representing a vending event, for example the date and time of the event. The data is periodically read by an interrogator, which downloads the data stored in the tag memory and erases the memory to reset the tag for continued monitoring of the vender. With this information an operator can reconcile revenues, track when sales take place and over what period of time, and track the work habits of service personnel.



(88) Date of publication of the international search report:  
8 July 2004

*For two-letter codes and other abbreviations, refer to the "Guidance Notes on Codes and Abbreviations" appearing at the beginning of each regular issue of the PCT Gazette.*

# INTERNATIONAL SEARCH REPORT

International Application No  
PCT/CA 03/00263

A. CLASSIFICATION OF SUBJECT MATTER  
IPC 7 G07F1/00 G07F9/02

According to International Patent Classification (IPC) or to both national classification and IPC

## B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)  
IPC 7 G07F

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base and, where practical, search terms used)

EP0-Internal

## C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	EP 0 986 033 A (MARS INC) 15 March 2000 (2000-03-15)	1-9
Y	abstract; claims 1,15,27; figures 2,3B,25 paragraphs [0020] - [0028], [0073]	10-12
Y	US 5 954 181 A (SCHWARZLI JOSEF W) 21 September 1999 (1999-09-21)	10-12
A	cited in the application abstract; figures 1-5	13,14
A	DE 196 18 962 A (K B SOFTWARE GMBH) 13 November 1997 (1997-11-13)	1-14
A	abstract; claims 1-15	
	US 4 412 292 A (SEDAM JASON K ET AL) 25 October 1983 (1983-10-25)	1-14
	abstract; claims 3-7,11; figure 2	
	-/--	

☒ Further documents are listed in the continuation of box C.

☒ Patent family members are listed in annex.

### \* Special categories of cited documents :

"A" document defining the general state of the art which is not considered to be of particular relevance

"E" earlier document but published on or after the international filing date

"L" document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified)

"O" document referring to an oral disclosure, use, exhibition or other means

"P" document published prior to the international filing date but later than the priority date claimed

"T" later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention

"X" document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone

"Y" document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art.

"&" document member of the same patent family

Date of the actual completion of the international search

6 April 2004

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# INTERNATIONAL SEARCH REPORT

International Application No

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## C.(Continuation) DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	US 3 776 338 A (JOHNSON K) 4 December 1973 (1973-12-04) column 1, lines 14-27 -----	15,16
X	US 3 559 788 A (BRITTON LEON R ET AL) 2 February 1971 (1971-02-02) abstract; claims 10,12; figure 4 -----	15,16
X	DE 44 37 813 A (TRENNER D WH MUENZPRUEFER) 18 April 1996 (1996-04-18) abstract; figures 1,2 -----	15,16
X	DE 196 13 716 C (TRENNER D WH MUENZPRUEFER) 11 December 1997 (1997-12-11) abstract; figures 1,2 -----	15,16
A	DE 23 49 786 A (WITTENBERGE NAEHMASCH VEB) 19 December 1974 (1974-12-19) abstract; figures 3-5 -----	16
A	FR 2 744 282 A (VALEO CLIMATISATION) 1 August 1997 (1997-08-01) abstract; figures 1,5 -----	16

# INTERNATIONAL SEARCH REPORT

international application No.  
PCT/CA 03/00263

## Box I Observations where certain claims were found unsearchable (Continuation of item 1 of first sheet)

This International Search Report has not been established in respect of certain claims under Article 17(2)(a) for the following reasons:

1. ☐ Claims Nos.:  
because they relate to subject matter not required to be searched by this Authority, namely:
2. ☐ Claims Nos.:  
because they relate to parts of the International Application that do not comply with the prescribed requirements to such an extent that no meaningful International Search can be carried out, specifically:
3. ☐ Claims Nos.:  
because they are dependent claims and are not drafted in accordance with the second and third sentences of Rule 6.4(a).

## Box II Observations where unity of invention is lacking (Continuation of item 2 of first sheet)

This International Searching Authority found multiple inventions in this international application, as follows:

see additional sheet

1. ☒ As all required additional search fees were timely paid by the applicant, this International Search Report covers all searchable claims.
2. ☐ As all searchable claims could be searched without effort justifying an additional fee, this Authority did not invite payment of any additional fee.
3. ☐ As only some of the required additional search fees were timely paid by the applicant, this International Search Report covers only those claims for which fees were paid, specifically claims Nos.:
4. ☐ No required additional search fees were timely paid by the applicant. Consequently, this International Search Report is restricted to the invention first mentioned in the claims; it is covered by claims Nos.:

### Remark on Protest

- ☐ The additional search fees were accompanied by the applicant's protest.
- ☐ No protest accompanied the payment of additional search fees.

**FURTHER INFORMATION CONTINUED FROM PCT/ISA/ 210**

This International Searching Authority found multiple (groups of) inventions in this international application, as follows:

1. claims: 1-14

The first group of inventions concerns a tracking system for vending machines which comprises memory means and a transceiver for receiving instructions and for transmitting sensor data of the vending machine to an interrogator.

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2. claims: 15, 16

The second group of inventions concerns an electro-mechanical mechanism for generating an electrical signal in a coin mechanism of a vending machine.

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# INTERNATIONAL SEARCH REPORT

Information on patent family members

International Application No

PCT/CA 03/00263

Patent document cited in search report		Publication date	Patent family member(s)	Publication date
EP 0986033	A	15-03-2000	AU 758958 B2 AU 4745299 A EP 0986033 A2	03-04-2003 16-03-2000 15-03-2000
US 5954181	A	21-09-1999	BR 9802794 A DE 19834732 A1 FR 2768535 A1 GB 2328059 A , B	09-11-1999 15-04-1999 19-03-1999 10-02-1999
DE 19618962	A	13-11-1997	DE 19618962 A1	13-11-1997
US 4412292	A	25-10-1983	AU 561884 B2 AU 5766286 A AU 561947 B2 AU 5766386 A AU 551692 B2 AU 8034582 A CA 1166356 A1 DE 3205620 A1 IT 1149761 B JP 1726468 C JP 4001392 B JP 57155685 A	21-05-1987 06-11-1986 21-05-1987 06-11-1986 08-05-1986 26-08-1982 24-04-1984 16-09-1982 10-12-1986 19-01-1993 10-01-1992 25-09-1982
US 3776338	A	04-12-1973	AU 467007 B2 AU 5170873 A BE 794880 A1 CA 989788 A1 DE 2304973 A1 ES 411238 A1 FR 2170230 A1 IT 984242 B JP 48085297 A LU 66942 A1 NL 7301515 A	13-11-1975 08-08-1974 29-05-1973 25-05-1976 30-08-1973 16-04-1976 14-09-1973 20-11-1974 12-11-1973 19-04-1973 07-08-1973
US 3559788	A	02-02-1971	GB 1287523 A	31-08-1972
DE 4437813	A	18-04-1996	DE 4437813 A1 DE 9421575 U1	18-04-1996 15-02-1996
DE 19613716	C	11-12-1997	DE 19613716 C1	11-12-1997
DE 2349786	A	19-12-1974	DD 105013 A1 CS 169099 B1 DE 2349786 A1 SU 554327 A1	05-04-1974 29-06-1976 19-12-1974 15-04-1977
FR 2744282	A	01-08-1997	FR 2744282 A1	01-08-1997